

Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: Cargill, Incorporated
Facility Location: 602 Industrial Road, Iowa Falls, IA
Air Quality Operating Permit Number: 99-TV-050R1
Expiration Date: September 10, 2008

EIQ Number: 92-0760
Facility File Number: 42-01-003

Responsible Official

Name: Greg Lofstedt
Title: Plant Superintendent
Mailing Address: 602 Industrial Road
Iowa Falls, Iowa 50126
Phone #: 515-648-6375

Permit Contact Person for the Facility

Name: Greg Lofstedt
Mailing Address: 602 Industrial Road
Iowa Falls, Iowa 50126
Phone #: 515-648-6375

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
bu/day.....	bushels/day
CFR.....	Code of Federal Regulations
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
gr/dscf.....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NSPS.....	new source performance standards
lb/hr	pounds per hour
lb/MMBtu.....	pounds per million British thermal units
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ≤ 10 μm
SO ₂	sulfur dioxide
NO _x	nitrogen oxide
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Cargill, Incorporated

Permit Number: 99-TV-050R1

Facility Description: Soybean Processing Plant

Equipment List

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description
1	1.1	Hull Grinding
	1.2	Pod Grinder
	1.3	Elevator Aspiration
	1.4	Kice Aspiration
2	2.1	Grain Receiving- Rail
4	4.1	Meal Grinding
	4.2	Conveying
7	7.1	Grain Unloading from Truck and Rail Pits
8	8.1	Grain Cleaning
	8.2	Split and Seed Aspirators
	8.3	Dryer Aspirator and Aspiration from 2 Hull Silos
	8.4	Storage and Process Aspiration (Conveyors and 12 Grain Silos)
9	9.0	Dryers
	9.1	Dryers Burners
10	10.1	Grain Receiving- Truck
11	11.1	Cracking
	11.2	Cleaning/ Dehulling
	11.3	Hull Sifter
	11.4	Hull Aspirator
	11.5	Conveying
14	14.1	Flakers (10 flaking mills)
	14.2	Conveying
15	15.1	Rail Loadout- Meal and Hulls
	15.2	Conveying
26	26.01	Erie City Natural Gas/Fuel Oil Fired Boiler
27	27.1	Meal Loadout Storage
	27.2	Meal Loadout Storage
29	29.1	Meal Dryer
	29.2	Meal Cooling
30	30.1	Bean Conditioner
31	31.1	Spent Flake Storage Bins (4- indoor bins)
32	32	Fugitive- Vegetable Oil Processing Solvent Emissions
34	34.1, 34.2, 34.3	Nebraska Boiler
34.2	34.2a, 34.2b, 34.2c	Nebraska Boiler(Heat Recovery Stack)
35	35.1	Flow Agent Storage Tank

Insignificant Equipment List

**Insignificant Emission
Unit Number****Insignificant Emission Unit Description**

**Fug
Fug
Fug
Fug
Fug**

**Welding Operations
Office Building Furnaces
Fuel Oil Tank #1
Fuel Oil Tank #2
Fuel Oil Tank #3**

II. Plant-Wide Conditions

Facility Name: Cargill, Incorporated
Permit Number: 99-TV-050R1

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: September 11, 2003
Ending on: September 10, 2008

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rule 22.115.

This permit has been renewed as part of a settlement agreement between Cargill's Iowa Falls Plant and the IDNR, as set out in Administrative Consent Order No. 2003-AQ-23. The permit was evaluated for CAM applicability for affected points. See Appendix A for a copy of the consent agreement.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)¹:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or

¹ This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

Particulate Matter (federally enforceable)²:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.

Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Plant-wide Operating Limit: *The plant shall be operated according to the following conditions:*

Process throughput:

1. This facility shall be limited to a grain crushing/processing rate of 95,000 bu/day.
2. The rate shall be determined on a rolling-twelve month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 78-A-071-S5

² This is the current language in the Iowa SIP, and is enforceable by EPA.

Reporting & Recordkeeping:

In order for this facility to demonstrate compliance with the above listed plant-wide operating limit, the facility must keep the following records on-site for a minimum of five (5) years and have them available for inspection by the Iowa Department of Natural Resources.

1. Bushels per day processed shall be recorded daily.
2. The rate, bushels/day, will be calculated and recorded on a rolling-twelve month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 78-A-071-S5

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Cargill, Incorporated – Iowa Falls is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Cargill, Incorporated – Iowa Falls shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

Section 112(j) of the Clean Air Act (MACT Hammer)

On April 29, 2002, Cargill submitted a Part 1 MACT application to IDNR, indicating that the facility may be subject to the MACT standard for Industrial/Commercial/Institutional Boilers & Process Heaters, 40 CFR 63 Subpart DDDDD, when it's promulgated. Cargill must submit a Part 2 MACT application to IDNR by the deadline specified in 40 CFR 63.52(e), if 40 CFR 63 Subpart DDDDD has not been promulgated by that date.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

III. Emission Point-Specific Conditions

Facility Name: Cargill Incorporated
Permit Number: 99-TV-050R1

Emission Point ID Number: 1

Associated Equipment

Associated Emission Unit ID Numbers 1.1, 1.2, 1.3, 1.4
Emissions Control Equipment ID Number: 1.0
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: 1.1
Emission Unit Description: Hull Grinding
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 1.2
Emission Unit Description: Pod Grinder
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 1.3
Emission Unit Description: Elevator Aspiration
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 1.4
Emission Unit Description: Kice Aspiration
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 78-A-071-S5

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm
Emission Limit: 0.66 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 78-A-071-S5

Pollutant: Particulate Matter
Emission Limit: 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
Iowa DNR Construction Permit 78-A-071-S5

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

The facility is limited to a grain processing rate of 95,000 bushels per day.

Control equipment parameters:

The control equipment shall be operated and maintained according to manufacturer's specifications.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall record the daily grain processing rate.
2. The owner or operator shall maintain a record of the maintenance, inspection and repair of the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 78-A-071-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 140

Stack Diameter (inches): 12

Temperature: Ambient

Stack Exhaust Flow Rate (acfm): 7700

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 78-A-071-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2

Associated Equipment

Associated Emission Unit ID Number: 2.1
Emissions Control Equipment ID Number: 2.0
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 2.1
Emission Unit Description: Grain Receiving – Rail
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 0 %
Authority for Requirement: 567 IAC 23.1(2) "ooo"
40 CFR 60 Subpart DD

Pollutant: PM₁₀ - Particulate Matter ≤ 10 µm
Emission Limit(s): 0.045 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 94-A-523-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-523-S2
567 IAC 23.1(2) "ooo"
40 CFR 60 Subpart DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Parameters:

1. Permanent structures shall be installed which will allow ready access to the baghouse.
2. Sample ports shall be installed that are adequate for the test methods necessary to compliance testing.
3. A written Operation and Maintenance plan shall be established that includes a schedule for periodic inspection of the bags.

4. The Bean Rail Unloading Aspirator and baghouse will operate within the operating limits specified by the manufacturers.
5. Bags, which have a collection efficiency equal to or greater than the collection efficiency of the bags installed during initial emissions compliance testing, are required to be used.

Reporting & Record keeping:

1. The owner or operator must maintain onsite concise, written records which include:
Maintenance and repair performed on the baghouse.
2. Bag manufacturer's specifications which include collection efficiency of bags installed in the baghouse.
3. Dates on which bags in the baghouse are installed.

Authority for Requirement: Iowa DNR Construction Permit 94-A-523-S2

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 19.3

Temperature: Ambient

Stack Exhaust Flow Rate (acfm): 5600

Discharge: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 94-A-523-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may

vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 4

Associated Equipment

Associated Emission Unit ID Number: 4.1, 4.2
Emissions Control Equipment ID Number: 4.0
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 4.1
Emission Unit Description: Meal Grinding
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 4.2
Emission Unit Description: Conveying
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM₁₀ - Particulate Matter ≤ 10 µm
Emission Limit(s): 0.64 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 85-A-106-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.64 lb/hr, 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 85-A-106-S3
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 8
Stack Diameter (inches): 12
Temperature: Ambient
Stack Exhaust Flow Rate (acfm): 7350
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 85-A-106-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour

intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7

Associated Equipment

Associated Emission Unit ID Number: 7.1

Emissions Control Equipment ID Number: 7

Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 7.1

Emission Unit Description: Grain Unloading from Truck and Rail Pits

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 75-A-213-S4
567 IAC 23.1(2)"ooo"
40 CFR 60, Subpart DD

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 75-A-213-S4

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 75-A-213-S4
567 IAC 23.1(2)"ooo"
40 CFR 60, Subpart DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Parameters:

1. The baghouse shall be operated at all times during unloading and transfer.
2. The baghouse shall be operated and maintained according to manufacturer's instructions and specifications.

Reporting & Record keeping:

The owner or operator shall maintain the following records. Records shall be maintained for at least five years. Elevator Basement Unloading and Transfer recordkeeping shall encompass maintenance, inspection, and repair of the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 75-A-213-S4

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 8

Stack Dimensions (inches): 19.5 x 26

Exhaust Temperature: 70 °F

Stack Exhaust Flow Rate (acfm): 9600

Discharge: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 75-213-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 8

Associated Equipment

Associated Emission Unit ID Number: 8.1, 8.2, 8.3, 8.4

Emissions Control Equipment ID Number: 8

Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 8.1

Emission Unit Description: Grain Cleaning

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 8.2

Emission Unit Description: Split and Seed Aspirators

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 8.3

Emission Unit Description: Dryer Aspirator and Aspiration Silo

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 8.4

Emission Unit Description: Conveying

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 81-A-025-S2

567 IAC 23.1(2)"ooo"

40 CFR 60 DD

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm

Emission Limit(s): 0.40 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 81-A-025-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 81-A-025-S2

567 IAC 23.1(2)"ooo"

40 CFR 60 DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Parameters:

1. Permanent structures shall be installed which will allow ready access to the baghouse.
2. Sample ports shall be installed that are adequate for the test methods necessary to compliance testing.
3. A written Operation and Maintenance plan shall be established that includes a schedule for periodic inspection of the bags.
4. The Bean Rail Unloading Aspirator and baghouse will operate within the operating limits specified by the manufacturers.
5. Bags, which have a collection efficiency equal to or greater than the collection efficiency of the bags installed during initial emissions compliance testing, are required to be used.

Reporting & Record keeping:

The owner or operator must maintain onsite concise, written records which include:

1. Maintenance and repair performed on the baghouse.
2. Bag manufacturer's specifications which include collection efficiency of bags installed in the baghouse.
3. Dates on which bags in the baghouse are installed.

Authority for Requirement: Iowa DNR Construction Permit 81-A-025-S2

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 134

Stack Diameter (inches): 34.6

Temperature: Ambient

Stack Exhaust Flow Rate (acfm): 25,000

Discharge: horizontal

Authority for Requirement: Iowa DNR Construction Permit 81-025-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 9

Associated Equipment

Associated Emission Unit ID Number: 9.0, 9.1

Applicable Requirements

Emission Unit vented through this Emission Point: 9.0

Emission Unit Description: Grain Dryer

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 9.1

Emission Unit Description: Grain Dryer Burner

Raw Material/Fuel: Natural Gas

Rated Capacity: 28 MCF/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 81-A-023-S5
567 IAC 23.1(2)"ooo"
40 CFR 60 DD

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm

Emission Limit(s): 1.60 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 81-A-023-S5

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 81-A-023-S5
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 81-A-023-S5
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1. The use of the bean pre-cleaner system (EP #8 Elevator Cleaning & Transfer Aspirator) is required whenever the dryer is in use.
2. The column dryer shall have column plate perforations not to exceed 2.4 mm in diameter (ca. 0.094 inch).

Process throughput:

This facility shall be limited to a grain processing rate of 95,000 bu/day.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

The annual grain-processing rate of the facility shall be determined on a rolling twelve-month basis each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 81-A-023-S5

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 62

Stack Diameter (inches): 216 x 234

Exhaust Temperature(°F): 80

Stack Exhaust Flow Rate (scfm): 93,241 (95,000 acfm)

Discharge: This source vents near the top of the column on both sides, horizontal

Authority for Requirement: Iowa DNR Construction Permit 81-A-023-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 10

Associated Equipment

Associated Emission Unit ID Number: 10.1
Emissions Control Equipment ID Number: 10.0
Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 10.1
Emission Unit Description: Grain Receiving – Truck
Raw Material/Fuel: Soybeans
Rated Capacity: 637.5 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity (Fugitive)
Emission Limit(s): 5%
Authority for Requirement: Iowa DNR Construction Permit 89-A-105-S4
567 IAC 23.1(2)"ooo"
40 CFR 60 DD

Pollutant: Opacity
Emission Limit(s): 0%⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 89-A-105-S4
567 IAC 23.1(2)"ooo"
40 CFR 60 DD

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀ - Particulate Matter ≤ 10 µm
Emission Limit(s): 0.36 lb/hr, 1.58 tons/hr
Authority for Requirement: Iowa DNR Construction Permit 89-A-105-S4

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf, 1.58 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 89-A-105-S4

567 IAC 23.1(2)"ooo"

40 CFR 60 DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Equipment Parameters:

The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 89-A-105-S4

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 40.3

Stack Diameter (inches): 27.6

Temperature: Ambient

Stack Exhaust Flow Rate (scfm): 15,000

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 89-A-105-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 11

Associated Equipment

Associated Emission Unit ID Number: 11.1, 11.2, 11.3, 11.4, 11.5

Emissions Control Equipment ID Number: 11.0

Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 11.1

Emission Unit Description: Cracking

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 11.2

Emission Unit Description: Dehulling

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 11.3

Emission Unit Description: Hull Sifter

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 11.4

Emission Unit Description: Hull Aspirator

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 11.5

Emission Unit Description: Conveying

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: 567 IAC 22.3(3)

Iowa DNR Construction Permit 86-A-151-S2

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 86-A-151-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 86-A-151-S2
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Parameters:

1. The baghouse shall be used at all times while the dehulling machine is in use.
2. The baghouse shall be operated and maintained according to manufacturer's instructions and specifications.

Reporting & Record keeping:

The owner or operator shall maintain the following records. Records shall be maintained onsite for at least five years. Primary Dehulling record keeping shall consist of maintenance, inspection, and repair of the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 86-A-151-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 12

Stack Diameter (inches): 36.5

Exhaust Temperature (°F): 70

Stack Exhaust Flow Rate (acfm): 29,000

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 86-A-151-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 14

Associated Equipment

Associated Emission Unit ID Number: 14.1, 14.2
Emissions Control Equipment ID Number: 14.01
Emissions Control Equipment Description: RotoClone Cyclone
Emissions Control Equipment ID Number: 14.02
Emissions Control Equipment Description: Venturi Scrubber

Applicable Requirements

Emission Unit vented through this Emission Point: 14.1
Emission Unit Description: Flakers (10 flaking mills)
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 14.2
Emission Unit Description: Conveying
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 83-A-153-S4
567 IAC 22.3(3)

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm
Emission Limit(s): 1.35 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 83-A-153-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 83-A-153-S4
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Parameters:

1. The cyclone and scrubber shall be operated at all times while the flaker aspirator is in use.
2. The cyclone and scrubber shall be operated and maintained according to manufacturer's instructions.

Reporting & Record keeping:

The owner or operator shall maintain the following records. Records shall be maintained onsite for at least five years. Flaker aspiration record keeping shall consist of maintenance, inspection, and repair of the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 83-A-153-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 40.5

Stack Diameter (inches): 19 x 16.5

Exhaust Temperature (°F): 145

Stack Exhaust Flow Rate (acfm): 18,000

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 83-A-153-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Venturi Scrubber Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return

operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than 8 hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the pressure drop across the scrubber. If the pressure drop falls out of the normal operating range, corrective action will be taken within 8 hours to return the pressure drop to normal.
- Conduct observations of the stack and areas adjacent to the stack to determine if droplet reentrainment is occurring from an improperly operating mist eliminator. The signs of droplet reentrainment may include fallout of solid-containing droplets, discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If droplet reentrainment is occurring, the appropriate measures for remediation will be implemented within eight (8) hours.
- Check liquid flow rate on supply headers to the scrubber to monitor for problems such as nozzle pluggage, header pluggage, and nozzle erosion. Pluggage problems are indicated by lower than normal flow rate. If the liquid flow rate is out of the normal operating range, corrective action will be taken within eight (8) hours to return the flow rate to normal.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Conduct an internal inspection of the scrubber to search for signs of erosion, corrosion, or solids deposits in ductwork, and spray nozzles.

If any of the above conditions exist the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 15

Associated Equipment

Associated Emission Unit ID Number: 15.1, 15.2, 15.3

Emissions Control Equipment ID Number: 15.00

Emissions Control Equipment Description: Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 15.1

Emission Unit Description: Rail Loadout – Meal

Raw Material/Fuel: Meal

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 15.2

Emission Unit Description: Conveying

Raw Material/Fuel: Meal, Hull

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 15.3

Emission Unit Description: Rail Loadout – Hulls

Raw Material/Fuel: Hulls

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm

Emission Limit(s): 0.02 lb/hr, 0.09 tons/yr, 0.0008 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 85-A-107-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 85-A-107-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 28

Stack Diameter (inches): 12.5

Temperature: Ambient

Stack Exhaust Flow Rate (acfm): 3,205

Vertical, Unobstructed Discharge Required: No

Authority for Requirement: Iowa DNR Construction Permit 85-A-107-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 26

Associated Equipment

Associated Emission Unit ID Number: 26

Applicable Requirements

Emission Unit vented through this Emission Point: 26

Emission Unit Description: Erie City Natural Gas/Fuel Oil Fired Boiler

Raw Material/Fuel: Natural Gas, #2 Fuel Oil

Rated Capacity: 48.9 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 79-A-188-S3

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀ - Particulate Matter ≤ 10 µm

Emission Limit(s): 1.98 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 79-A-188-S3

Pollutant: Particulate Matter

Emission Limit(s): 0.60 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"(3)

Pollutant: Sulfur Dioxide (SO₂) (liquid fuel)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide (SO₂) (natural gas)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Fuels used in this boiler shall be limited to no. 2 fuel oil, natural gas, and vegetable oil.
2. The sulfur content of the no. 2 fuel oil burned in this unit shall not exceed 0.25% by weight sulfur.
3. The sulfur content of the vegetable oil burned in this unit shall not exceed 0.15% by weight sulfur.
4. No more than 3,000,000 gallons of vegetable oil shall be combusted plantwide per twelve month rolling period.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records demonstrating the sulfur content of the vegetable oil or fuel oil combusted in this unit. This may be done by testing or by fuel oil vendor certification.
2. The owner or operator shall keep records of the amount of vegetable oil combusted plantwide, and update the twelve month rolling total on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 79-A-188-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 140

Stack Diameter (inches): 42

Exhaust Temperature (°F): 420

Stack Exhaust Flow Rate (scfm): 12,000

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 79-A-188-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 27

Associated Equipment

Associated Emission Unit ID Numbers: 27.1, 27.2

Emissions Control Equipment ID Number: 27.01

Emissions Control Equipment Description: Cloth Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 27.1

Emission Unit Description: Meal Loadout Storage

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 27.2

Emission Unit Description: Meal Loadout Storage

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 27.3

Emission Unit Description: Truck Loadout – Hulls

Raw Material/Fuel: Hulls

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM₁₀ - Particulate Matter ≤ 10 μm

Emission Limit(s): 0.14 lb/hr, 0.63 tons/yr, 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 80-A-101-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 80-A-101-S2
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 65

Stack Diameter (inches): 12

Temperature: Ambient

Stack Exhaust Flow Rate (acfm): 167

Vertical, Unobstructed Discharge Required: No

Authority for Requirement: Iowa DNR Construction Permit 80-A-101-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Baghouse Operation and Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods and Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Check the cleaning sequence of the baghouse
- Check the hopper functions and performance
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours.

Annually

- Once per year a thorough inspection of the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight (8) hours. Bag replacement should be documented by identifying the date and number of bags replaced.
- Once per year a second, less thorough inspection of the interior of the baghouse and the condition of the bags will be completed. If abnormal conditions are detected the appropriate measure for remediation will be initiated within eight (8) hours.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated before the system is returned to service.

Maintain a written record of the inspection and any action resulting from the inspection.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 29**Associated Equipment**

Associated Emission Unit ID Number: 29.1, 29.2
Emissions Control Equipment ID Number: 29.01, 29.02, 29.03, 29.04, 29.05, 29.06
Emissions Control Equipment Description: Cyclones
Emissions Control Equipment ID Number: 29.10
Emissions Control Equipment Description: Venturi Scrubber

Applicable Requirements

Emission Unit vented through this Emission Point: 29.1
Emission Unit Description: Meal Dryer
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Unit vented through this Emission Point: 29.2
Emission Unit Description: Meal Cooling
Raw Material/Fuel: Soybeans
Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 89-A-106-S3
567 IAC 22.3(3)

Pollutant: PM₁₀ - Particulate Matter ≤ 10 µm
Emission Limit(s): 3.02 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 89-A-106-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 89-A-106-S3
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

This facility shall be limited to a grain processing rate of 95,000 bu/day.

Control equipment parameters:

1. The cyclone and scrubber shall be operated at all times while the meal dryer is in use.
2. The cyclone and scrubber shall be operated and maintained according to manufacturer's instructions.

Reporting & Record keeping:

The owner or operator shall maintain the following records. Records shall be maintained onsite for at least five years.

Authority for Requirement: Iowa DNR Construction Permit 89-A-106-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 90

Stack Diameter (inches): 60

Exhaust Temperature (°F): 120

Stack Exhaust Flow Rate (acfm): 55000

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 89-A-106-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Agency Venturi Scrubber Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than 8 hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the pressure drop across the scrubber. If the pressure drop falls out of the normal operating range, corrective action will be taken within 8 hours to return the pressure drop to normal.
- Conduct observations of the stack and areas adjacent to the stack to determine if droplet reentrainment is occurring from an improperly operating mist eliminator. The signs of droplet reentrainment may include fallout of solid-containing droplets, discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If droplet reentrainment is occurring, the appropriate measures for remediation will be implemented within eight (8) hours.
- Check liquid flow rate on supply headers to the scrubber to monitor for problems such as nozzle pluggage, header pluggage, and nozzle erosion. Pluggage problems are indicated by lower than normal flow rate. If the liquid flow rate is out of the normal operating range, corrective action will be taken within eight (8) hours to return the flow rate to normal.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Conduct an internal inspection of the scrubber to search for signs of erosion, corrosion, or solids deposits in ductwork, and spray nozzles.

If any of the above conditions exist the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 30**Associated Equipment**

Associated Emission Unit ID Number: 30.1

Applicable Requirements

Emission Unit vented through this Emission Point: 30.1

Emission Unit Description: Bean Conditioner

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 94-A-534-S2
567 IAC 22.3(3)

Pollutant: PM₁₀ - Particulate Matter $\leq 10 \mu\text{m}$

Emission Limit(s): 0.09 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 94-A-534-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 94-A-534-S2
567 IAC 22.3(3)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 95

Stack Diameter (inches): 24

Exhaust Temperature (°F): 74

Stack Exhaust Flow Rate (acfm): 100

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 94-A-534-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. The records shall be maintained for five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not cause a change in the visible emissions reading, then a Method 9 reader will be brought in to determine if a violation has occurred. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the inspection.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 31

Associated Equipment

Associated Emission Unit ID Number: 31.1

Emissions Control Equipment ID Number: 31.00

Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 31.1

Emission Unit Description: Spent Flake Storage Bins (14)

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 93-A-041-S4
567 IAC 22.3(3)

Pollutant: PM₁₀ - Particulate Matter $\leq 10 \mu\text{m}$

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 93-A-041-S4

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 93-A-041-S4
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

1. The baghouse shall be operated at all times while the spent flake leg is in use.
2. The spent flake baghouse shall be operated and maintained according to manufacturer's instructions and specifications.

Reporting & Record keeping:

The owner or operator shall maintain the following records. Records shall be maintained onsite for at least five years. Maintenance, inspection, and repair of the control equipment shall be recorded.

Authority for Requirement: Iowa DNR Construction Permit 93-A-041-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 100.6

Stack Diameter (inches): 6

Exhaust Temperature (°F): 70

Stack Exhaust Flow Rate (acfm): 1000

Discharge: Downward

Authority for Requirement: Iowa DNR Construction Permit 93-A-041-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 32

Associated Equipment

Associated Emission Unit ID Number: 32

Emissions Control Equipment ID Number: 32.00

Emissions Control Equipment Description: Mineral Oil Absorber

Applicable Requirements

Emission Unit vented through this Emission Point: 32

Emission Unit Description: Hexane Extraction

Raw Material/Fuel: Soybeans

Rated Capacity: 95,000 bu/day

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compound (VOC)

Emission Rate (tons/yr): 453 tons per twelve month rolling period

Authority for Requirement: Iowa DNR Construction Permit 97-A-327-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The extractant solvent usage shall not exceed 160,354 gallons per twelve-month rolling total.
2. VOC content of the extractant solvent shall not exceed 5.65 lbs/gallon.
3. The grain-processing rate shall be limited to 95,000 bushels per day.
4. On the extractant solvent tank, the closed vent system shall be designed to collect all VOC vapors, reduce inlet vapors by 95% or greater, and be operated with no detectable emissions, as defined in 40 CFR 60.112b(a)(3).

Control equipment parameters:

The control system shall be operated and parameters monitored in accordance with the latest version of the operating plan that has been submitted and approved by the DNR.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Plant-wide total extractant solvent usage in gallons per twelve-month rolling total.

2. The owner or operator shall keep records of the annual grain-processing rate of the facility, determined on a rolling twelve-month basis each month of operation.
3. Maintain MSDS sheets of the extractant solvent used in the extraction process.

Authority for Requirement: Iowa DNR Construction Permit 97-A-327-S3

4. The owner or operator shall keep records showing the dimension of the storage vessel, an analysis showing the capacity of the storage vessel, and a copy of the operating plan, for the lifetime of the storage tank.
5. A copy of the documentation submitted to demonstrate compliance with the control device's required control efficiency (as required in 40 CFR 60.113b(c)) shall be kept.
6. Parameter monitoring records as required by 40 CFR 60.115b(c).

Authority for Requirement: Iowa DNR Construction Permit 97-A-327-S3
NSPS 40 CFR 60.116b(b) Subpart Kb Standards of Performance
for Volatile Organic Liquid Storage Vessels

This unit is subject to 40 CFR Part 63 Subpart GGGG - National Emission Standards for Solvent Extraction for Vegetable Oil Production and Subpart A – General Provisions. Below is a summary of those requirements.

- Note: For consistency purposes, citations are consistent with the CFR.

§63.2833 Is my source categorized as existing or new?

(a) This subpart applies to each existing and new affected source. You must categorize your vegetable oil production process as either an existing or a new source.

- This source was constructed before May 26, 2000 therefore it is considered an existing source.

§63.2834 When do I have to comply with the standards in this subpart?

(a) This source is considered an existing source, therefore it must be in compliance with this subpart within 3 years after the effective date (effective date = April 12, 2001).

STANDARDS

§63.2840 What emission requirements must I meet?

(a)(1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. An operating month, as defined in §63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2). Equation 1 of this section follows:

$$\text{Compliance Ratio} = \frac{\text{Actual HAP Loss}}{\text{Allowable HAP Loss}} \quad \text{Equation 1}$$

(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section follows:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^n ((\text{Oilseed})_i * (\text{SLF})_i)} \quad \text{Equation 2}$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in §63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in §63.2853.

Oilseed = Tons of each oilseed type “i” processed during the previous 12 operating months, as shown in §63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed “i” listed in Table 1 of this section, as follows:

Table 1 of §63.2840 – Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

Type of Oilseed Process	A source that...	Oilseed Solvent Loss Factor (gal/ton)	
		Existing Sources	New Sources
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution.	0.4	0.3
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting.	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.7	0.4
(v) Flax	processes flax.	0.6	0.6
(vi) Peanuts	processes peanuts.	1.2	0.7
(vii) Rapeseed	processes rapeseed.	0.7	0.3
(viii) Safflower	processes safflower.	0.7	0.7
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption.	1.7	1.5
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25
(xii) Sunflower	processes sunflower.	0.4	0.3

(b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:

- (1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to §63.2850, then you must categorize the month as an operating month, as defined in §63.2872.
- (2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.
- (3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in §63.2872. Exclude any nonoperating months from the compliance ratio determination.
- (4) If your source is subject to an initial startup period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.
- (5) If your source is subject to a malfunction period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.
- (6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.

(c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.

(d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section.

COMPLIANCE REQUIREMENTS

§63.2850 How do I comply with the hazardous air pollutant emission standards?

(a) General requirements. The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:

- (1) Submit the necessary notifications in accordance with §63.2860, which include:
 - (i) Initial notifications for existing sources.
 - (ii) Initial notifications for new and reconstructed sources.
 - (iii) Initial notifications for significant modifications to existing or new sources.
 - (iv) Notification of compliance status.
- (2) Develop and implement a plan for demonstrating compliance in accordance with §63.2851.
- (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in §63.2852.
- (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with §63.2862.
- (5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:
 - (i) Annual compliance certifications in accordance with §63.2861(a).
 - (ii) Periodic SSM reports in accordance with §63.2861(c).
 - (iii) Immediate SSM reports in accordance with §63.2861(d).

- (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.
- (b) *Existing sources under normal operation.* You must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section (see Appendix B of this permit) for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section (see Appendix B of this permit).

§63.2851 What is a plan for demonstrating compliance?

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:

- (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
 - (4) When each measurement will be made.
 - (5) Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.
 - (6) Example logs of how data will be recorded.
 - (7) A plan to ensure that the data continue to meet compliance demonstration needs.
- (b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

§63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with §63.6(e)(3) and implement the plan, when applicable. You must complete the SSM plan before the compliance date for your source. You must also incorporate the SSM plan by reference in your source's title V permit and keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your source to minimize emissions during a qualifying SSM event for which the source chooses the §63.2850(e)(2) malfunction period, or the §63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the

procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

§63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the “actual solvent loss,” which is used to calculate your compliance ratio as described in §63.2840.

(a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:

(1) The dates that define each operating status period during a calendar month. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date of this rule, your source determines the solvent loss on an accounting month, as defined in §63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

(2) Source operating status. You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

Table 1 of §63.2853 – Categorizing Your Source Operating Status

If during a recorded time interval...	then your source operating status is...
(i) your source processes any amount of listed oilseed and your source is not operating under an initial startup period or a malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	a normal operating period.
(ii) your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	a nonoperating period.
(iii) you choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2)	an initial startup period.
(iv) you choose to operate your source under a malfunction period subject to §63.2850(e)(2)	a malfunction period.
(v) your source processes agricultural products not defined as listed oilseed	an exempt period.

(3) Measuring the beginning and ending solvent inventory. You are required to measure and record the solvent inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in §63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.

(4) Gallons of extraction solvent received. Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.

(5) Solvent inventory adjustments. In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the “actual solvent loss” for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraph (a)(5) (ii) of this section:

(ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. Solvent working capacity is defined in §63.2872. In general, solvent working capacity is the volume of solvent normally

retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-time documented adjustment to the solvent inventory.

(b) Use Equation 1 of this section to determine the actual solvent loss occurring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

Monthly Actual

$$\text{Solvent Loss (gal)} = \sum_{i=1}^n (\text{SOLV}_B - \text{SOLV}_E + \text{SOLV}_R \pm \text{SOLV}_A)_i \quad \text{Equation 1}$$

Where:

SOLV_B = Gallons of solvent in the inventory at the beginning of normal operating period “i” as determined in paragraph (a)(3) of this section.

SOLV_E = Gallons of solvent in the inventory at the end of normal operating period “i” as determined in paragraph (a)(3) of this section.

SOLV_R = Gallons of solvent received between the beginning and ending inventory dates of normal operating period “i” as determined in paragraph (a)(4) of this section.

SOLV_A = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period “i” as determined in paragraph (a)(5) of this section.

N = Number of normal operating periods in a calendar month.

(c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of §63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.

(1) Nonoperating periods as described in paragraph (a)(2)(ii) of this section.

(2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in §63.2850(e)(2).

(4) Exempt operation periods as described in paragraph (a)(2)(v) of this section.

§63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?

(a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of HAP in solvent received for the

previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of §63.2840 to determine the compliance ratio.

(b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:

(1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of each calendar month following an operating month. Equation 1 of this section follows:

$$\begin{array}{l} \text{Monthly Weighted} \\ \text{Average HAP Content} \\ \text{of Extraction Solvent} \\ \text{(volume fraction)} \end{array} = \frac{\sum_{i=1}^n (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad \text{Equation 1}$$

Where:

Received_i = Gallons of extraction solvent received in delivery "i."

Content_i = The volume fraction of HAP in extraction solvent delivery "i."

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

N = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average. When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of

solvent received for the 12 operating months, as expressed by Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of §63.2840 to determine the compliance ratio. Equation 2 of this section follows:

$$\begin{array}{l} \text{12 - Month Weighted} \\ \text{Average of HAP Content} \\ \text{in Solvent Received} \\ \text{(volume fraction)} \end{array} = \frac{\sum_{i=1}^{12} (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad \text{Equation 2}$$

Where:

Received_i = Gallons of extraction solvent received in operating month “i” as determined in accordance with §63.2853(a)(4).

Content_i = Average volume fraction of HAP in extraction solvent received in operating month “i” as determined in accordance with paragraph (b)(1) of this section.

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

§63.2855 How do I determine the quantity of oilseed processed?

All oilseed measurements must be determined on an as received basis, as defined in §63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in §63.2840.

(a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs

(a)(1) through (5) of this section:

(1) The dates that define each operating status period. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.

(2) Source operating status. You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs as described in §63.2853(a)(2).

(3) Measuring the beginning and ending inventory for each oilseed. You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by §63.2862(c)(3).

(4) Tons of each oilseed received. Record the type of oilseed and tons of each shipment of oilseed received and added to your on-site storage.

(5) Oilseed inventory adjustments. In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:

- (i) Oilseed that mold or otherwise become unsuitable for processing.
- (ii) Oilseed you sell before it enters the processing operation.
- (iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.
- (iv) Oilseed processed through operations prior to solvent extraction such as screening, dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing.
- (v) Periodic physical measurements of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, may be used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

(b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month.

Equation 1 of this section follows:

Monthly Quantity

$$\begin{array}{l} \text{of Each Oilseed} \\ \text{Processed (tons)} \end{array} = \sum_{n=1}^n (\text{SEED}_B - \text{SEED}_E + \text{SEED}_R \pm \text{SEED}_A)$$

Where:

SEED_B = Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in accordance with paragraph (a)(3) of this section.

SEED_E = Tons of oilseed in the inventory at the end of normal operating period “i” as determined in accordance with paragraph (a)(3) of this section.

SEED_R = Tons of oilseed received during normal operating period “i” as determined in accordance with paragraph (a)(4) of this section.

SEED_A = Tons of oilseed added or removed from the oilseed inventory during normal operating period “i” as determined in accordance with paragraph (a)(5) of this section.

N = Number of normal operating periods in the calendar month during which this type oilseed was processed.

(c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in §63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:

- (1) Nonoperating periods as described in §63.2853 (a)(2)(ii).
- (2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).
- (3) Malfunction periods as described in §63.2850(e)(2).
- (4) Exempt operation periods as described in §63.2853 (a)(2)(v).
- (5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

NOTIFICATIONS, REPORTS, AND RECORDS

§63.2860 What notifications must I submit and when?

(a) Initial notification for existing sources. For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:

- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.
- (4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(c) Significant modification notifications. Any existing or new source that plans to undergo a significant modification as defined in §63.2872 must submit two reports as described in paragraphs 63.2860(c)(1) and (2).

(d) Notification of compliance status. As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:

- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the previous 12 operating months.
- (4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:
 - (i) The plan for demonstrating compliance (as described in §63.2851) and SSM plan (as described in §63.2852) are complete and available on-site for inspection.
 - (ii) You are following the procedures described in the plan for demonstrating compliance.
 - (iii) The compliance ratio is less than or equal to 1.00.

§63.2861 What reports must I submit and when?

(a) Annual compliance certifications. The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (6) of this section in the annual certification:

- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the 12 calendar months period covered by the report.
- (4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:

(i) You are following the procedures described in the plan for demonstrating compliance.

(ii) The compliance ratio is less than or equal to 1.00.

(b) Deviation notification report. Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under §63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(1) through (4) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.

(4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in §63.10(e)(3)(iii).

(d) Immediate SSM reports. If you handle a SSM during an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2) differently from procedures in the SSM plan, then you must submit an immediate SSM report as defined in §63.2861(d)(1) through (3).

§63.2862 What records must I keep?

(a) You must satisfy the recordkeeping requirements of this section by April 12, 2004.

(b) Prepare a plan for demonstrating compliance (as described in §63.2851) and a SSM plan (as described in §63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the §63.2850(c)(2) or (d)(2) initial startup period or the §63.2850(e)(2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.

(c) If your source processes any listed oilseed, record the items in paragraphs (c)(1) through (5) of this section:

(1) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:

(i) Dates that define each operating status period during a calendar month.

(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.

(iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.

(iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.

(v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The total solvent loss for each calendar month, regardless of the source operating status.

- (vii) The actual solvent loss in gallons for each operating month.
- (2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:
 - (i) The gallons of extraction solvent received in each delivery.
 - (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
 - (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with §63.2854(b)(2).
- (3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:
 - (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
 - (ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.
 - (iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.
 - (iv) The tons of each type of listed oilseed received at the affected source each normal operating period.
 - (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.
 - (vi) The tons of each type of listed oilseed processed during each operating month.
- (d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:
 - (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in §63.2853(c).
 - (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in §63.2854(b)(3).
 - (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in §63.2855(c).
 - (4) A determination of the compliance ratio. Using the values from §63.2853, 63.2854, 63.2855, and Table 1 of §63.2840, calculate the compliance ratio using Equation 2 of §63.2840.
 - (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the applicable requirements in §63.2850.
- (e) For each SSM event subject to an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
 - (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.

- (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
- (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

§63.2863 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for review in accordance with §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

Subpart A – General Provisions

§40 CFR 63.4, Prohibited Activities and Circumvention:

- (a) *Prohibited Activities.*
 - (1) The permittee shall not operate any affected source in violation of the requirements of this part except under:
 - (i) An extension of compliance granted by the Administrator under this part; or
 - (ii) An extension of compliance granted under this part by a State with an approved permit program; or
 - (iii) An exemption from compliance is granted by the President under section 112(i)(4) of the Clean Air Act.
 - (2) The permittee shall not fail to keep records, notify, report, or revise reports as required under this part.
- (b) *Circumvention.* The permittee shall not build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to:
 - (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.
 - (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.
 - (3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.
- (c) *Severability.* Notwithstanding any requirement incorporated into a Title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

§40 CFR 63.6, Compliance with standards and maintenance requirements

(e) Operation and maintenance requirements.

(1)(i) At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

(2)(i) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan, review of operation and maintenance records, and inspection of the source).

Authority for Requirement: 40 CFR 63 Subpart GGGG and Subpart A (General Provisions)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 90

Stack Diameter (inches): 6

Stack Temperature (°F): 100

Stack Exhaust Flow Rate (scfm): 118 (125 acfm)

Discharge: Vertical w/o rain cap or w/ unobstructing rain cap

Authority for Requirement: Iowa DNR Construction Permit 97-A-327-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

Authority for Requirement: 567 IAC 22.108(3)

CAM Plan for EP 32 Mineral Oil Scrubber for Hexane

I. Background

A. Emissions Unit

Description: Final Vent and Fugitives
Identification: EP 32
Facility: Cargill, Iowa Falls

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa Permit #95-A-327-S1
VOC emission limit: 453 tons/yr
Current Monitoring Requirements: Mineral oil scrubber (MOS) operating parameters.

C. Control Technology

Mineral oil scrubber (MOS)

II. Monitoring Approach

A. Indicators

Calculated 12-month rolling total hexane losses, mineral oil temperature and flow rate will be used as indicators.

B. Measurement Approach

Mass-balance calculations will use the facility's hexane purchase records. The scrubber's mineral oil flow rate and temperature are monitored.

C. Indicator Ranges

The indicator levels for the scrubber are a mineral oil flow rate between 6 and 18 gallons per minute and a mineral oil temperature between 180 and 212 degrees F.

D. QIP (Quality Improvement Plan) Threshold

The QIP thresholds are six excursions total of either the mineral oil flow rate or the mineral oil temperature in one six month reporting period or one instance of 12-month rolling total hexane emissions greater than 453 tons. The 12-month rolling totals will be recalculated and recorded each month.

E. Performance Criteria

Data representativeness:

The mineral oil scrubber is designed to operate at maximum control efficiency at specific mineral oil flow rate and temperature ranges. The scrubber equipment has real-time sensors for both flow rate and temperature, which are recorded a minimum of once per day. If the flow rate or temperature have drifted out of the optimal efficiency range, this is an indication of the potential for increased hexane emissions.

	Facility hexane losses, determined from hexane make-up solvent purchases, is representative of the scrubber's operation.
Verification of operational status:	Mineral oil flow rate and temperature are monitored to insure proper operation of the mineral oil scrubber. The scrubber equipment will be maintained in good working condition according to the manufacturer's O&M procedures.
QA/QC practices and criteria:	Monitoring the mineral oil flow rate and temperature will serve to alert the facility in circumstances when the mineral oil scrubber experiences short-term excursions. Any recorded flow rate or temperature outside of the indicator range will signify an excursion. When an excursion occurs, corrective action will be initiated within 8 hours, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.
Monitoring frequency and data collection procedures:	The mineral oil flow rate and temperature sensors provide real-time readings which are recorded a minimum of once per day when the facility's emission unit is in operation. Facility hexane losses will be calculated using material mass balance. Hexane losses will be assumed to equal all new hexane purchases made to maintain the facility's inventory. Each month, the facility calculates and records the 12-month rolling total hexane emissions for the facility.

III. Justification

A. Background

This facility processes various oilseeds to extract vegetable oils. The pollutant specific emission unit is the seed oil extraction and refinement unit that uses hexane as solvent. Hexane emissions are controlled by a Mineral Oil Scrubber.

B. Rationale for Selection of Performance Indicator

The scrubber's mineral oil flow rate and temperature were selected as the performance indicators as they are indicative of operation of the scrubber in a manner necessary to

maximize collection and reuse of hexane and minimize emissions. An excursion of these indicators out of the optimal operating range indicates a possibility of reduced performance of the scrubber.

Facility 12-month rolling total hexane emissions are used as long-term performance indicator. An excursion of this indicator suggests generalized reduced performance of the mineral oil scrubber.

C. Rationale for Selection of Indicator Level

The mineral oil scrubber flow rate and temperature ranges are 10 to 18 gallons per minute and 180 to 212 F, respectively. These indicator ranges were selected because operation of the scrubber outside the optimal ranges for these parameters is indicative of a potential for increased hexane emissions.

The selected QIP thresholds are six excursions total of either the mineral oil flow rate or the mineral oil temperature in one six month reporting period or one instance in which the facility's 12-month rolling total hexane emissions exceed 453 tons. The 12-month rolling totals will be recalculated and recorded each month. This level is the facility's permitted annual emissions limit for hexane. If a QIP threshold is exceeded once, a QIP will be developed and implemented.

Emission Point ID Number: 34**Associated Equipment**

Associated Emission Unit ID Number: 34.1, 34.2, 34.3

Applicable Requirements

Emission Unit vented through this Emission Point: 34.1, 34.2, 34.3

Emission Unit Description: Nebraska Boiler

Raw Material/Fuel: Natural Gas (34.1), Fuel Oil #2 (34.2), Vegetable Oil (34.3)

Rated Capacity: 78 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 20 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-389-S1
567 IAC 23.1(2)"III"
40 CFR 60 Subpart Dc

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"(3)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 18.7 lb/hr (Oil)

39.4 tons/yr (Total combined emissions from fuel oil, natural gas and vegetable oil)

2.5 lb/MMBtu (Limit when burning fuel oil #2)

Authority for Requirement: Iowa DNR Construction Permit 98-A-389-S1
567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide (SO₂) (natural gas)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 10.7 lb/hr (fuel oil)

4.2 lb/hr (natural gas)

15.2 lb/hr (vegetable oil)

39.4 tons/yr (Total combined emissions from fuel oil, natural gas and vegetable oil)

Authority for Requirement: Iowa DNR Construction Permit 98-A-389-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Fuels used in this boiler shall be limited to no. 2 fuel oil, natural gas, and vegetable oil.
2. The sulfur content of the no. 2 fuel oil burned in this unit shall not exceed 0.25% by weight sulfur.
3. The sulfur content of the vegetable oil burned in this unit shall not exceed 0.15% by weight sulfur.
4. No more than 3,000,000 gallons of vegetable oil shall be combusted plantwide per twelve month rolling period.
5. No more than 2,000,000 gallons combined total of vegetable oil and/or fuel oil shall be combusted in this unit per twelve month rolling period.

Control equipment parameters:

The fuel gas recirculation control system shall be in operation at all times the boiler is operating except during start-up, shut-down or malfunction.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records demonstrating the sulfur content of the vegetable oil or fuel oil combusted in this unit. This may be done by testing for the vegetable oil, or as required in 40 CFR 60.48c(f) for the fuel oil.
2. The owner or operator shall keep records of the amount of vegetable oil combusted plantwide, and update the twelve month rolling total on a monthly basis.
3. The owner or operator shall keep records of the combined total amount of vegetable oil and fuel oil combusted in this unit, and update the twelve month rolling total on a monthly basis.
4. The owner or operator shall keep records of the amount and type of fuel combusted in this boiler per day as required by NSPS Subpart Dc, 40 CFR 60.48c(f).

Authority for Requirement: Iowa DNR Construction Permit 98-A-389-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 46

Stack Diameter (inches): 42

Stack Exhaust Flow Rate (acfm): 15,600

Stack Temperature (°F): 400

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 98-A-389-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is burning fuel oil and at or near full capacity and record the reading. The records shall be maintained for five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not cause a change in the visible emissions reading, then a Method 9 reader will be brought in to determine if a violation has occurred. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the inspection.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 34.2

Associated Equipment

Associated Emission Unit ID Numbers : 34.2a, 34.2b, 34.2c

Applicable Requirements

Emission Unit vented through this Emission Point: 34.2a, 34.2b, 34.2c

Emission Unit Description: Nebraska Boiler (Heat Recovery Stack)

Raw Material/Fuel: Natural Gas (34.2a), Fuel Oil #2 (34.2b), Vegetable Oil (34.2c)

Rated Capacity: 78 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 20 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-387

567 IAC 23.1(2)"III"

40 CFR 60 Subpart Dc

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"(3)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 18.7 lb/hr (Oil)

39.4 tons/yr (Total combined emissions from fuel oil, natural gas and vegetable oil)

2.5 lb/MMBtu (Limit when burning fuel oil #2)

Authority for Requirement: Iowa DNR Construction Permit 02-A-387

567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide (SO₂) (natural gas)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 10.7 lb/hr (fuel oil)

4.2 lb/hr (natural gas)

15.2 lb/hr (vegetable oil)

39.4 tons/yr (Total combined emissions from fuel oil, natural gas and vegetable oil)

Authority for Requirement: Iowa DNR Construction Permit 02-A-387

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Fuels used in this boiler shall be limited to no. 2 fuel oil, natural gas, and vegetable oil.
2. The sulfur content of the no. 2 fuel oil burned in this unit shall not exceed 0.25% by weight sulfur.
3. The sulfur content of the vegetable oil burned in this unit shall not exceed 0.15% by weight sulfur.
4. No more than 3,000,000 gallons of vegetable oil shall be combusted plantwide per twelve month rolling period.
5. No more than 2,000,000 gallons combined total of vegetable oil and/or fuel oil shall be combusted in this unit per twelve month rolling period.

Control equipment parameters:

The fuel gas recirculation control system shall be in operation at all times the boiler is operating except during start-up, shut-down or malfunction.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records demonstrating the sulfur content of the vegetable oil or fuel oil combusted in this unit. This may be done by testing for the vegetable oil, or as required in 40 CFR 60.48c(f) for the fuel oil.
2. The owner or operator shall keep records of the amount of vegetable oil combusted plantwide, and update the twelve month rolling total on a monthly basis.
3. The owner or operator shall keep records of the combined total amount of vegetable oil and fuel oil combusted in this unit, and update the twelve month rolling total on a monthly basis.
4. The owner or operator shall keep records of the amount and type of fuel combusted in this boiler per day as required by NSPS Subpart Dc, 40 CFR 60.48c(f).

Authority for Requirement: Iowa DNR Construction Permit 02-A-387

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 46

Stack Diameter (inches): 36

Stack Exhaust Flow Rate (scfm): 9,700

Stack Temperature (°F): 150

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 02-A-387

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 35

Associated Equipment

Associated Emission Unit ID Number: 35.1

Emissions Control Equipment ID Number: 35.1

Emissions Control Equipment Description: Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 35.1

Emission Unit Description: Flow Agent Storage Tank

Raw Material/Fuel: Flow Agent

Rated Capacity: 0.2976 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-016
567 IAC 23.3(2)"d"

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31.25

Stack Diameter (inches): 30 x 30

Stack Exhaust Flow Rate (scfm): 650

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes

Authority for Requirement: Iowa DNR Construction Permit 01-A-016

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of

why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.

- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to

determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An

emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,

- iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.
- 567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

- i. Correct typographical errors
- ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- iii. Require more frequent monitoring or reporting by the permittee; or
- iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

- i. Do not violate any applicable requirements
- ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
- iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
- ii. The permittee's suggested draft permit
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC

22.111-567 IAC 22.113 The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.105(1)"a"(4)

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"h"; 567 IAC 23.2(3)"h" - *State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must

comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

- b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
- a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

- 1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- 2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
- 4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. 567 IAC 22.111 (1)"d"

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau

Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1004 W. Madison
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

Appendix A: Consent Order No. 2003-AQ-23

Appendix B: 40 CFR Part 63 Subpart GGGG Tables

Table 1 of §63.2833 -- Categorizing Your Source as Existing or New

If your affected source...	And if...	Then your affected source...
(1) was constructed or began construction before May 26, 2000	reconstruction has not occurred	is an existing source.
(2) began reconstruction, as defined in §63.2, on or after May 26, 2000	(i) reconstruction was part of a scheduled plan to comply with the existing source requirements of this subpart; and (ii) reconstruction was completed no later than 3 years after the effective date of this subpart	remains an existing source.
(3) began a significant modification, as defined in §63.2872, at any time on an existing source	the modification does not constitute reconstruction	remains an existing source.
(4) began a significant modification, as defined in §63.2872, at any time on a new source	the modification does not constitute reconstruction	remains a new source.
(5) began reconstruction on or after May 26, 2000	reconstruction was completed later than 3 years after the effective date of this subpart	is a new source.
(6) began construction on or after May 26, 2000		is a new source.

Table 1 of §63.2834 -- Compliance Dates for Existing and New Sources

If your affected source is categorized as...	And if...	Then your compliance date is...
(a) an existing source		3 years after the effective date of this subpart.
(b) a new source	you startup your affected source before the effective date of this subpart	the effective date of this subpart.
(c) a new source	you startup your affected source on or after the effective date of this subpart	your startup date.

Table 1 of §63.2840 -- Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

Type of Oilseed Process	A source that...	Oilseed Solvent Loss Factor (gal/ton)	
		Existing Sources	New Sources
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution.	0.4	0.3
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting.	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.7	0.4
(v) Flax	processes flax.	0.6	0.6
(vi) Peanuts	processes peanuts.	1.2	0.7
(vii) Rapeseed	processes rapeseed.	0.7	0.3
(viii) Safflower	processes safflower.	0.7	0.7
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption.	1.7	1.5
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25
(xii) Sunflower	processes sunflower.	0.4	0.3

Table 1 of §63.2850 -- Requirements for Compliance with HAP Emission Standards

Are you required to...	For periods of normal operation?	For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?
(a) Operate and maintain your source in accordance with your SSM plan as described in §63.2852?	No, your source is not subject to the SSM plan, but rather the HAP emission limits of this standard.	Yes, throughout the entire initial startup period.	Yes, throughout the entire malfunction period.
(b) Determine and record the extraction solvent loss in gallons from your source?	Yes, as described in §63.2853.	Yes, as described in §63.2862(e).	Yes, as described in §63.2862(e).
(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction solvent in shipment received?	Yes.	Yes.	Yes.
(d) Determine and record the tons of each oilseed type processed by your source?	Yes, as described in §63.2855.	No.	No.
(e) Determine the weighted average volume fraction of HAP in extraction solvent received as described in §63.2854 by the end of the following calendar month?	Yes.	No. Except for solvent received by a new or reconstructed source commencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is included in the weighted average HAP determination for the next operating month.	No, the HAP volume fraction in any solvent received during a malfunction period is included in the weighted average HAP determination for the next operating month.
(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed and compliance ratio for each 12 operating month period as described in §63.2840 by the end of the following calendar month?	Yes.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(g) Submit a Notification of Compliance Status or Annual Compliance Certification as appropriate?	Yes, as described in §§63.2860(d) and 63.2861(a).	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the initial startup period.	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the malfunction period.

(h) Submit a Deviation Notification Report by the end of the calendar month following the month in which you determined that the compliance ratio exceeds 1.00 as described in §63.2861(b)?	Yes.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(i) Submit a Periodic SSM Report as described in §63.2861(c)?	No, a SSM activity is not categorized as normal operation.	Yes.	Yes.
(j) Submit an Immediate SSM Report as described in §63.2861(d)?	No, a SSM activity is not categorized as normal operation.	Yes, only if your source does not follow the SSM plan.	Yes, only if your source does not follow the SSM plan.

Table 2 of §63.2850 -- Schedules for Demonstrating Compliance Under Various Source Operating Modes

If your source is...	and is operating under...	then your recordkeeping schedule ...	You must determine your first compliance ratio by the end of the calendar month following...	Base your first compliance ratio on information recorded...
(a) Existing	Normal operation,	Begins on the compliance date.	The first 12 operating months after the compliance date.	During the first 12 operating months after the compliance date.
(b) New	(1) Normal operation,	Begins on the startup date of your new source.	The first 12 operating months after the startup date of the new source.	During the first 12 operating months after the startup date of the new source.
	(2) An initial startup period,	Begins on the startup date of your new source.	The first 12 operating months after termination of the initial startup period, which can last for up to 6 months.	During the first 12 operating months after the initial startup period, which can last for up to 6 months.
(c) Existing or new that has been significantly modified	(1) Normal operation,	Resumes on the startup date of the modified source.	The first operating month after the startup date of the modified source.	During the previous 11 operating months prior to the significant modification and the first operating month following the initial startup date of the source.
	(2) An initial startup period,	Resumes on the startup date of the modified source.	The first operating month after termination of the initial startup period, which can last up to 3 months.	During the 11 operating months before the significant modification and the first operating month after the initial startup period.

**Table 1 of §63.2853 -- Categorizing Your Source
Operating Status**

If during a recorded time interval...	then your source operating status is...
(i) your source processes any amount of listed oilseed and your source is not operating under an initial startup period or a malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	a normal operating period.
(ii) your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	a nonoperating period.
(iii) you choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2)	an initial startup period.
(iv) you choose to operate your source under a malfunction period subject to §63.2850(e)(2)	a malfunction period.
(v) your source processes agricultural products not defined as listed oilseed	an exempt period.

Table 1 of §63.2870 -- Applicability of 40 CFR Part 63, Subpart A, to 40 CFR, Part 63, Subpart GGGG

General Provisions Citation	Subject of Citation	Brief Description of Requirement	Applies to Subpart	Explanation
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	
§63.2	Definitions	Definitions for part 63 standards	Yes	Except as specifically provided in this subpart.
§63.3	Units and abbreviations	Units and abbreviations for part 63 standards	Yes	
§63.4	Prohibited activities and circumvention	Prohibited activities; compliance date; circumvention; severability	Yes	
§63.5	Construction/reconstruction	Applicability; applications; approvals	Yes	Except for subsections of §63.5 as listed below.
§63.5(c)	[Reserved]			
§63.5(d)(1)(ii)(H)	Application for approval	Type and quantity of HAP, operating parameters	No	All sources emit HAP. Subpart GGGG does not require control from specific emission points.
§63.5(d)(1)(ii)(I)	[Reserved]			
§63.5(d)(1)(iii), (d)(2), (d)(3)(ii)		Application for approval	No	The requirements of the application for approval for new, reconstructed and significantly modified sources are described in §63.2860(b) and (c) of subpart GGGG. General provision

				<p>requirements for identification of HAP emission points or estimates of actual emissions are not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for describing control equipment and the estimated and actual control efficiency of such equipment apply only to control equipment to which the subpart GGGG requirements for quantifying solvent destroyed by an add-on control device would be applicable</p>
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Appendix C: DNR Air Quality Policy 3-b-08